

## 1. Introduction

The Hospital ERP System provides a **modular subscription model**. Hospitals subscribe to **only the modules they need**, while the **number of staff determines subscription cost scaling**.

- **Flexibility** → Hospitals pick features they need.
- **Scalability** → Pricing adjusts as staff grows.
- **Smart Dependencies** → Related modules auto-included.
- **Role Mapping** → Each module defines required roles & responsibilities.

## 2. Subscription Model

### 2.1 Feature-Based

- Hospitals select **any combination of modules**.
- Dependencies are **auto-added**.

Example:

- If hospital selects **EMR**, system also adds **Patient Info**.
- If hospital selects **Insurance Claims**, system also adds **Billing & Patient Info**.

### 2.2 Staff-Size Based Pricing

| Staff Range | License Type            | Pricing Impact            |
|-------------|-------------------------|---------------------------|
| 1–10        | Small Clinic License    | Base price (x1)           |
| 11–20       | Small Hospital License  | Base × 1.5                |
| 21–50       | Medium Hospital License | Base × 2                  |
| 51–100      | Large Hospital License  | Base × 3                  |
| 101+        | Enterprise License      | Base × 5 + Custom add-ons |

### 3. Module List with Dependencies & Roles

| Module                           | Dependencies           | Submodules                             | Roles Involved                     |
|----------------------------------|------------------------|--|------------------------------------|
| Patient Information Management   | None                   | Registration, Demographics             | Receptionist, Admin                |
| Electronic Medical Records (EMR) | Patient Info           | Clinical notes, Prescriptions, History | Doctor, Nurse                      |
| OPD & IPD Management             | Patient Info, Billing  | Admissions, Bed allocation, Discharge  | Doctor, Nurse                      |
| Appointment Scheduling           | Patient Info           | Doctor calendar, Reminders             | Receptionist, Patient              |
| Healthcare Billing & Accounting  | Patient Info, OPD/IPD  | Invoices, Payments                     | Accounts, Admin                    |
| Insurance Claims Management      | Billing, Patient Info  | Claim submission, Tracking             | Insurance Officer, Accounts        |
| Human Resource Management        | None                   | Payroll, Shifts, Staff database        | HR Staff, Admin                    |
| Pharmaceutical System            | Inventory, Billing     | Drug catalog, Dispensing               | Pharmacist, Doctor                 |
| Inventory & Procurement          | Billing, Pharmacy, Lab | Stock management, Vendors              | Store Manager, Procurement Officer |
| Laboratory Information (LIMS)    | Patient Info, EMR      | Test catalog, Reports                  | Lab Tech, Doctor                   |
| Radiology Information            | Patient Info, EMR      | Imaging orders, Storage                | Radiologist, Doctor                |
| Immunization Tracking            | Patient Info, EMR      | Vaccination schedule                   | Nurse, Doctor                      |
| Data Analytics & Reporting       | All active modules     | Dashboards, Reports                    | Management, Admin                  |

## 4. Subscription Flow (User-Friendly)

1. **Hospital selects staff size** → Pricing tier applied.
2. **Hospital selects modules** → Any feature can be chosen.
3. **System auto-checks dependencies** → Adds missing required modules.
  - e.g., Choosing Radiology auto-adds Patient Info + EMR.
4. **System auto-assigns roles** → Maps staff functions to modules.
  - e.g., Choosing Lab → Assigns Lab Technician role.
5. **Final summary** → Shows:
  - Selected modules
  - Auto-added modules
  - Role mapping
  - Pricing (based on staff count)
6. **Activate subscription** → ERP configured for the hospital.

## 5. Example Scenarios

### Scenario 1: Small Clinic (5 staff)

- Chooses: Appointment Scheduling + Billing.
- System adds: Patient Info (dependency).
- Roles: Receptionist (appointments), Accounts (billing).

### Scenario 2: Medium Hospital (35 staff)

- Chooses: OPD/IPD + EMR + Pharmacy.
- System adds: Patient Info, Billing, Inventory.
- Roles: Doctors (EMR/OPD), Nurses (IPD), Pharmacist (Pharmacy), Store Manager (Inventory).

### Scenario 3: Enterprise Hospital (120 staff)

- Chooses: All modules.
- System assigns: Specialized roles (Lab Tech, Radiologist, Insurance Officer, HR Staff, etc.).
- Pricing: Enterprise License (highest).

### Hospital ERP - Feature Based Subscription Flow

